

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.                 | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |  |
|---------------------------------|-----------------|----------------------|------------------------|------------------|--|
| 09/545,851                      | 04/10/2000      | Yasuyuki Sonoda      | 2406-5                 | 3157             |  |
| 22204                           | 7590 09/21/2005 |                      | EXAMINER               |                  |  |
| NIXON PEABODY, LLP              |                 |                      | HOYE, MI               | HOYE, MICHAEL W  |  |
| 401 9TH STREET, NW<br>SUITE 900 |                 | ART UNIT             | PAPER NUMBER           |                  |  |
| WASHINGTON, DC 20004-2128       |                 |                      | 2614                   |                  |  |
|                                 |                 |                      | DATE MAILED: 09/21/200 | 5                |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)  |  |  |  |  |
|--|--|---|--|--|--|--|
|  | 09/545,851   | SONODA ET AL.   |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit  |  |  |  |  |
|  | Michael W. Hoye  | 2614  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c   | orrespondence address   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be time  Till apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| Status   |  |   |  |  |  |  |
| 1)⊠ ·Responsive to communication(s) filed on 29 Ju   | ne 2005.   |   |  |  |  |  |
| · _ ·  | action is non-final.   |   |  |  |  |  |
| Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |   |  |  |  |  |
| closed in accordance with the practice under E   | x parte Quayle, 1935 C.D. 11, 45   | 53 O.G. 213.  |  |  |  |  |
| Disposition of Claims  |  |   |  |  |  |  |
| 4)⊠ Claim(s) <u>39,40,42-56,59-61,70 and 71</u> is/are pending in the application.   |  |   |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |   |  |  |  |  |
| 5) Claim(s) is/are allowed.  |  |   |  |  |  |  |
| 6)⊠ Claim(s) <u>39,40,42-56,59-61,70 and 71</u> is/are rejected.   |  |   |  |  |  |  |
| 7) Claim(s) is/are objected to.  |  |   |  |  |  |  |
| .8) Claim(s) are subject to restriction and/or   | election requirement.  |   |  |  |  |  |
| Application Papers   |  |   |  |  |  |  |
| 9) The specification is objected to by the Examine   | ſ.   |   |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>22 September 2004</u> is/are: a)⊠ accepted or b) objected to by the Examiner.  |  |   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |   |  |  |  |  |
| Replacement drawing sheet(s) including the correcti  | on is required if the drawing(s) is obj  | jected to. See 37 CFR 1.121(d).   |  |  |  |  |
| 11) The oath or declaration is objected to by the Ex   | aminer. Note the attached Office   | Action or form PTO-152.   |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |   |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:   |  |   |  |  |  |  |
| 1. Certified copies of the priority documents  | s have been received.  | •   |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |  |   |  |  |  |  |
| 3. Copies of the certified copies of the prior   |  |   |  |  |  |  |
| application from the International Bureau  | (PCT Rule 17.2(a)).  |   |  |  |  |  |
| * See the attached detailed Office action for a list   | of the certified copies not receive  | ed.   |  |  |  |  |
|  |  |   |  |  |  |  |
|  |  |   |  |  |  |  |
| Attachment(s)  |  |   |  |  |  |  |
| Notice of References Cited (PTO-892)   | 4) Interview Summary   | (PTO-413)   |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date   |  |   |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/22,4/28,5/5/05.   | 5) Notice of Informal P  | Patent Application (PTO-152)  |  |  |  |  |
| 200000000000000000000000000000000000000  | -/   |   |  |  |  |  |

Art Unit: 2614

#### **DETAILED ACTION**

# Response to Arguments

1. Applicants' arguments filed on June 29, 2005 with respect to claims 39-40, 42-56, 59-61, and 70-71, have been fully considered but they are not persuasive.

As to amended independent claims 39, 40, 54, 55, 56, 70 and 71, the Applicants argue, beginning at the bottom of page 15 of the Remarks section and continuing to page 16 that, "there is no disclosure that the DVHT performs random calculation according to delay information received from the AMI 23 in the Richards et al. reference." The Applicants further argue that, "it is respectfully submitted that the Richards et al. reference may disclose random calculation at the AMI, however, there is no teaching nor remote suggestion to carry out a random calculation at the DVHT."

In response, the Examiner respectfully disagrees with the Applicants because the Richards et al. reference discloses that the cable headend 12 typically includes an Administration and Maintenance Interface (AMI) 23 that generates randomized back-off arrays, and each DVHT 14 has its own back-off array, which the AMI 23 downloads to the DVHT 14 (see col. 2, line 66 – col. 3, line 4). In accordance with one aspect of the Richards et al reference, "the DVHT 14 includes a processor (e.g., central processing unit) 38 and Random Access Memory (RAM) 40 connected to the processor (FIG. 2). Also, Read Only Memory (ROM) 42 has a boot program 43 that is operable when the DVHT 14 is initially turned on. The boot program 43 loads and allows the first part of an initialization of the DVHT 14 with the AMI 23. <u>During the initialization of</u> the DVHT 14, the AMI 23 then transmits along the RF Trunk 18 to the initializing DVHT 14 the

Art Unit: 2614

particular back-off array used for controlling the DVHT's attempts and reattempts in sending messages to the AMI 23 without collision with other messages from another subscriber DVHT. This "Boot" program 43 allows registration of the DVHT 14 with the AMI 23. At the time that a DVHT 14 is registered within the AMI 23 of the cable system 10, the DVHT has been initialized with a randomized back-off array." (see col. 5, lines 35-51) The random back-off consists of two algorithms, a uniformly distributed retry algorithm and n exponential retry algorithm (see col. 5, line 57 - col. 6, line 42). In reattempting message transmissions [by the DVHT], "the first set of message transmissions are reattempted after a respective time-out. That is a first randomized interval of time such as between 0 to 100 milliseconds. After these first reattempts, the DVHT then reattempts message transmission after a respective time-out. That is a second randomized interval of time such as between 0 to 1,000 milliseconds. The randomized interval of time can be calculated from a uniformly distributed retry algorithm and the second randomized interval of time can be calculated from exponential retry algorithm" (see col. 6, lines 43-53, also see col. 7, lines 1-25 and claims 1-5). Therefore, the AMI generates and transmits to a DVHT a randomized back-off array, and the DVHT attempts and then reattempts, if necessary, message transmissions based on a respective time-out period that is a randomized interval of time which is calculated from the retry algorithms stored in the DVHT. Assuming arguendo that no random calculation is performed at the DVHT, the Richards et al reference discloses in col. 6, lines 56-60, that more traditional methods specifically teach that randomization is accomplished by the entity that is transmitting the messages in traffic (e.g., the DHVT 14). Or, in other words, it is well known to those of ordinary skill in the art to calculate the initial transmission

Art Unit: 2614

scheduling item with random numbers at each receiver, as claimed in the amended independent claims.

In addition to, regarding amended independent claim 71, the Examiner respectfully notes that the claim as amended and, more specifically, the features upon which applicant relies (i.e., the initial transmission schedule time is <u>calculated with a random number</u> at each receiver using the determining data for determining initial transmission scheduling time) are not recited in the rejected claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding dependent claims 42-53 and 59-60, the Applicants make similar arguments as described above pertaining to the Richards et al. reference used in the rejection of the independent claims, as well as the Corrigan et al., Lowell, and Gammie et al. references used in combination with the Richards et al. reference for some of the dependent claims, and the Examiner respectfully disagrees with the Applicants for same reasons as noted above regarding the Richards reference as applied to the independent claims.

#### Claim Objections

2. Claim 52 is objected to because of the following informalities: the claim is currently dependent upon canceled claim 41. It appears that the claim should be dependent on claim 40. Appropriate correction is required.

Claim 39 is objected to because of the following informalities: the claimed "initial transmission schedule" on line 8 of the claim should be --initial transmission scheduling--, in

Art Unit: 2614

line 9, the claimed "the data for determining initial transmission scheduling time" should be -the <u>determining</u> data for determining initial transmission scheduling time--, and in line 17, the
claimed "retrial information <u>is</u> failed" should be --retrial information <u>has</u> failed--. Appropriate
correction is required.

Claims 40, 54, 55, 56, 61, 70 and 71 are objected to for similar informalities as noted in claim 39 above.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 39-40, 48-50, 52, 54-56 and 70-71 are rejected under 35 U.S.C. 102(e) as being anticipated by Richards et al (USPN 6,237,146), cited by the Examiner.

As to claim 39, the claim is rejected based on similar grounds as the rejection of claims 40 and 56, as described below.

As to claim 40, note the Richards et al reference which discloses a television receiver 30 (col. 3, lines 8-9). The claimed displaying images in response to receipt of data transmitted by a broadcasting device is met by the Digital Video Home Terminals (DHVT 14) as shown in Fig. 1, which are connected to a television set 30 for displaying images that were transmitted from the Administration and Maintenance Interface (AMI) 23 (col. 3, lines 5-19). The claimed

Art Unit: 2614

transmitting response information to response information receiving equipment via a communication line is met by the DHVT 14, which may uplink information over communication line 18/22 to the AMI 22 as shown in Fig. 1 (see col. 2, lines 51-65 and col. 3, lines 5-19). The claimed, "wherein the television receiver performs the following processing: 1) receiving determining data for determining initial transmission scheduling time and retrial information containing a retrial period transmitted by said broadcasting station at the same time; 2) calculating the initial transmission scheduling time with a random number using the data for determining initial transmission scheduling time, and receiving response information when the initial transmission scheduling time comes; 3) when communication between the television receivers and the response information receiving equipment is unsuccessful, adding the retrial period to the initial transmission scheduling time to calculate retrial transmission scheduling time, and retransmitting the retrial information at the calculated scheduling time; 4) when the retransmission of the retrial information has failed, calculating a subsequent retrial transmission scheduling time by adding the retrial period to the retrial transmission scheduling time; and 5) repeating a process for retransmitting the retrial information at the subsequent retrial transmission scheduling time until the retransmission of the retrial information is successful" is met by the Richards et al. reference, which discloses that the cable headend 12 typically includes an Administration and Maintenance Interface (AMI) 23 that generates randomized back-off arrays, and each DVHT 14 has its own back-off array, which the AMI 23 downloads to the DVHT 14 (see col. 2, line 66 – col. 3, line 4). In accordance with one aspect of the Richards et al reference, "the DVHT 14 includes a processor (e.g., central processing unit) 38 and Random Access Memory (RAM) 40 connected to the processor (FIG. 2). Also, Read Only Memory

Art Unit: 2614

(ROM) 42 has a boot program 43 that is operable when the DVHT 14 is initially turned on. The boot program 43 loads and allows the first part of an initialization of the DVHT 14 with the AMI 23. During the initialization of the DVHT 14, the AMI 23 then transmits along the RF Trunk 18 to the initializing DVHT 14 the particular back-off array used for controlling the DVHT's attempts and reattempts in sending messages to the AMI 23 without collision with other messages from another subscriber DVHT. This "Boot" program 43 allows registration of the DVHT 14 with the AMI 23. At the time that a DVHT 14 is registered within the AMI 23 of the cable system 10, the DVHT has been initialized with a randomized back-off array." (see col. 5, lines 35-51) The random back-off consists of two algorithms, a uniformly distributed retry algorithm and n exponential retry algorithm (see col. 5, line 57 – col. 6, line 42). In reattempting message transmissions [by the DVHT], "the first set of message transmissions are reattempted after a respective time-out. That is a first randomized interval of time such as between 0 to 100 milliseconds. After these first reattempts, the DVHT then reattempts message transmission after a respective time-out. That is a second randomized interval of time such as between 0 to 1,000 milliseconds. The randomized interval of time can be calculated from a uniformly distributed retry algorithm and the second randomized interval of time can be calculated from exponential retry algorithm" (see col. 6, lines 43-53, also see col. 7, lines 1-25 and claims 1-5). Therefore, the AMI generates and transmits to a DVHT a randomized back-off array, and the DVHT attempts and then reattempts, if necessary, message transmissions based on a respective time-out period that is a randomized interval of time which is calculated from the retry algorithms stored in the DVHT. Assuming arguendo that no random calculation is performed at the DVHT, the Richards et al reference discloses in col. 6, lines 56-60, that more traditional methods specifically

Art Unit: 2614

teach that randomization is accomplished by the entity that is transmitting the messages in traffic (e.g., the DHVT 14). Or, in other words, it is well known to those of ordinary skill in the art to calculate the initial transmission scheduling item with random numbers at each receiver, as claimed above.

As to claim 48, the Richards et al reference discloses the claimed television and data receiver as described above in claim 4. Richards further discloses that the type of messages may involve Pay-per-view matters (col. 5, lines 28-35). Although, the Richards et al reference does not specifically disclose that the time remaining for transmission is computed from a transmission end time sent from said broadcast unit, and said retrial transmission conditions are altered according to said time remaining for transmission. For example, it is inherent that there is only a limited time that a user may purchase and view a pay-per-view event, therefore, there would only be a certain amount of time remaining for transmission which is determined by a transmission end time that would be sent from the broadcast unit and whereby the retrial conditions would be altered according to the remaining time left for transmission.

As to claim 49, the Richards et al reference further discloses the claimed notification data that is generated for making notification of the results of communications with the response information receiving equipment as met by acknowledgement or other information that is sent back to the DVHT 14 from the AMI 23 (see col. 7, lines 9-12).

As to claim 50, the Richards et al reference discloses that the claimed communication results are received from the response information receiving equipment or AMI 23 and notification data is generated as described above in claim 15.

Art Unit: 2614

As to claim 52, the Richards et al reference further discloses storing or memory means for storing said response information to be transmitted after a delay as shown by RAM 40 in Fig. 2, and the claimed notification means is met by the DVHT 14, which includes the "boot" program 43 contained in ROM 42, the randomized array in RAM 40, and the CPU 38, which operate to transmit a message and the AMI 23 sends an acknowledgement back if the message is received (see col. 5, lines 35-54 and col. 7, lines 2-25).

As to claims 54-55, the claims are rejected based on similar grounds as described in the rejection of claims 40 and 56.

As to claim 56, note the Richards et al reference which discloses a data receiving device. The claimed means for receiving data sent from a broadcasting device is met by the Digital Video Home Terminals (DHVT 14) as shown in Fig. 1. The claimed communication means for transmitting response information via a communication line is also met by the DHVT 14, which may uplink information over communication line 18/22 to the AMI 22 as shown in Fig. 1 (see col. 2, lines 51-65 and col. 3, lines 5-19). The claimed, "wherein said receiving means receives determining data for determining initial transmission scheduling time and retrial information containing a retrial period transmitted by said broadcasting station at the same time", is met by the AMI (Administrative and Maintenance Interface) 23 transmitting along the RF Trunk 18 to the initializing DVHT (Digital Video Home Terminal) 14 the particular back-off array used for controlling the DVHT's attempts and reattempts in sending messages to the AMI 23 (see col. 5, lines 42-48 and col. 6, lines 43-53). The remainder of the claim limitations are met by the rejection of claim 40 as described above.

Application/Control Number: 09/545,851 Page 10

Art Unit: 2614

As to claim 70, the Richards et al reference discloses a data transceiving method for receiving data from a broadcast device and sending response information via a communication line to response information receiving equipment. The claimed transmitting data for determining initial transmission scheduling time and retrial information containing a retrial period transmitted at the same time from said broadcasting device, is met by the AMI (Administrative and Maintenance Interface) 23 transmitting along the RF Trunk 18 or communication line 18/22 to the initializing DVHT (Digital Video Home Terminal) 14 the particular back-off array used for controlling the DVHT's attempts and reattempts in sending messages to the AMI 23 (see Fig. 1 & col. 5, lines 42-48 and col. 6, lines 43-53). The claimed sending said response information to said response information receiving equipment is also met by the DHVT 14, which may uplink information over to the AMI 22 as shown in Fig. 1 (see col. 2, lines 51-65 and col. 3, lines 5-19). The remainder of the claim limitations are met by the rejection of claim 40 as described above.

As to claim 71, the Richards et al reference discloses a recording medium for storing a program as met by the ROM 42 that has the boot program 43 (col. 5, lines 35-48) that performs all of the claimed processing which is met as described in the system/receiver claims previously described above (e.g. claims 40 and 56).

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 42, 51, 53 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards et al.

As to claims 42 and 59, the Richards et al reference discloses the claimed television and data receiver as described above in claims 40 and 56 respectively. The Richards et al reference does not specifically disclose determination as to whether or not to make retrial transmission is made on basis of transmission end time provided by the broadcasting device. However, the Examiner takes Official Notice that it is notoriously well known in the art of interactive video distribution systems to allow only a limited time period for some types of retrial transmissions to occur for the advantage of not allowing a receiver to send a response to an interactive broadcast once a window of interaction time period has expired. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to allow only a limited time period for some types of retrial transmissions to occur for the advantage given above.

As to claim 51, the Richards et al reference discloses the claimed television receiver as described above in claim 49. The Richards et al reference does not specifically disclose that a history of communications with said response information receiving equipment is stored in memory, and notification data is generated. However, the Examiner takes Official Notice that it is notoriously well known in the art of interactive video distribution systems to automatically create and maintain communication logs or histories of successful or failed communications with the receiving equipment and to generate appropriate notification data accordingly. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time

Art Unit: 2614

of the invention to have a history of communications with said response information receiving equipment stored in memory, and generate notification data for the advantages given above.

As to claim 53, the Richards et al reference discloses the claimed television receiver as described above in claim 52. The Richards et al reference does not specifically disclose editing means for editing said response information when an edit instruction is sent from a user.

However, the Examiner takes Official Notice that it is notoriously well known in the art of interactive video distribution systems to have editing means for editing response information when an edit instruction is sent from a user for the advantages of allowing a user to change the information that is to going to be sent to the information receiving equipment and giving the user more versatility in communicating messages for transmission. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to include editing means for editing said response information when an edit instruction is sent from a user for the advantages given above.

7. Claims 43, 47 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards et al., in view of Corrigan et al (USPN 5,966,636), both cited by the Examiner.

As to claims 43 and 60, the Richards et al reference discloses the claimed television and data receiver as described above in claims 40 and 56 respectively. The Richards et al reference does not specifically disclose detection means for detecting causes of non-establishment of communications with said response information receiving equipment. The Corrigan et al reference teaches the claimed detection means for detecting causes of non-establishment of communications with said response information receiving equipment as described in col. 11,

lines 48-53, where if the number of retries has been exceeded a message will be sent stating the cause for the access failure. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the data receiver of Richards et al with the error detection means of Corrigan et al for the advantage of notifying users of potential causes of the failed communication attempts. One of ordinary skill in the art would have been led to make such a modification since it would be beneficial to incorporate error detection means into the data receiver system for locating the causes of communication failures.

As to claim 47, Corrigan further discloses the claimed notification data is generated for making notification of said detected cause by sending a message stating the cause of the access failure (col. 11, lines 50-53).

8. Claims 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards et al., in view of Corrigan et al, in further view of Lowell (USPN 6,012,086), all cited by the Examiner.

As to claim 44, the Richards and Corrigan references disclose the claimed television receiver as described above in claim 43. The Richards and Corrigan references do not explicitly disclose retrial condition alteration means for altering conditions for subsequent retrial transmissions from the next time on, on the basis of the cause detected. Lowell teaches that alternate phone numbers or sources may be used to connect based on errors in attempting to connect to the source server (see col. 7, lines 8-25 and col. 8, lines 15-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the television receivers of Richards and Corrigan with the retrial condition alteration

Art Unit: 2614

means for altering conditions for retrial transmissions from the next time on, on the basis of the cause detected, as disclosed by Lowell. One of ordinary skill in the art would have been led to make such a modification since it would be beneficial for the user if the receiver system automatically made attempts to alter the connection based on initial failed attempts and attempting to avoid the cause of those failed attempts.

As to claim 45, Richards discloses altering time intervals for retry attempts as previously described above, and Lowell further discloses that the retrial condition alteration means may generate notification data for altering the number of times for retrial transmissions (see col. 7, lines 10-12).

As to claim 46, Lowell further discloses that the retrial condition alteration means suspend retrial transmissions after a specified number of retry attempts have been made or if the server is down, etc... (see col. 7, lines 8-25 and col. 8, lines 15-30).

9. Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gammie et al (USPN 5,270,809), in view of Richards et al, both cited by the Examiner.

As to claim 61, note the Gammie et al reference which discloses an IRD 206 and television receiver 220 (see Fig. 2). The claimed tuner for selecting a transport stream from data sent from a broadcasting source is met by tuner 304 (as shown in Fig. 3), which selects a channel from the incoming signal sent from the program broadcasting device 202 (see Figs. 2 & 3, col. 5, lines 5-9 and col. 5, line 66 – col. 6, line 3). The claimed transport decoder...and AV decoder for outputting display data of a selected service to a monitor is met by downconverter/demodulator 302 and descrambler 303 (Fig. 3). The claimed control input unit is

Art Unit: 2614

met by user keypad 307 as shown in Fig. 3 or a remote control for transmitting a signal to the IRD (see col. 8, lines 58-66, also see col. 6, lines 5-11 and Figs. 2 and 3). The claimed line communication unit for sending response information over a communication line...is met by modem 313 (Fig. 3). The claimed CPU is met by processor 304 and DCP 405 (see Figs. 3 and 4). The claimed memory is met by processor DCP 405, which may comprise a MC68HC11E9, which inherently comprises memory and a control program (col. 6, lines 62-65). Gammie discloses that the control program retransmits said response information via said line communication unit based on retrial information contained in the broadcast data, when communication with said response information receiving equipment is unsuccessful is met by the system operator at the broadcasting station transmitting retry information or data to the decoders that were unable to successfully call-in, where all decoders with a retry bit set by the control program should call in when a retry window is opened by the system controller (see col. 8, lines 2-4, col. 11, lines 14-19 & 50-53, and col. 12, lines 26-27). Gammie et al does not explicitly disclose the claimed, "wherein said tuner receives determining data for determining initial transmission scheduling time and retrial information transmitted by said broadcasting station at the same time..." However, the Richards et al reference specifically teaches that the Set-Top Box/receiver or DVHT (Digital Video Home Terminal) 14 (col. 3, line 8), which inherently includes a tuner, "determines data for determining initial transmission scheduling time and retrial information transmitted by said broadcasting station at the same time...", as met by the AMI (Administrative and Maintenance Interface) 23 transmitting along the RF Trunk 18 to the initializing DVHT (Digital Video Home Terminal) 14 the particular back-off array used for controlling the DVHT's attempts and reattempts in sending messages to the AMI 23 (see col. 5,

Art Unit: 2614

lines 42-48 and col. 6, lines 43-53). The DHVT or "communication means" also retransmits said response information to the "response information receiving equipment" or AMI 23 when communication between the television receiver and the response information receiving equipment is unsuccessful (see col. 5, line 36 - col. 6, line 53). In col. 5, line 36 - col. 6, line 53 of the Richards et al reference, the "receiver" or DHVT 14 (set-top box) receives the retrial information, or data contained in the broadcast data used for retransmitting said response information according to said retrial information when communication with said response information receiving equipment is unsuccessful, from the Administration and Maintenance Interface (AMI 23), which sends to the DHVT a particular back-off array used for controlling the DHVT's attempts and reattempts in successfully sending messages without collision with other messages from other subscribers using the communication line (18, 20, 22, see Fig. 1 and col. 2, lines 51-65). The remainder of the claim limitations are met by Richards et al as described in the rejection of claim 40. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the Gammie et al reference with the Richards et al reference for the advantage of having the receiver/tuner determine initial transmission scheduling time and retrial information transmitted by said broadcasting station at the same time and retransmitting the response information when communication is unsuccessful. One of ordinary skill in the art would have been led to make such a modification in order to simplify the transmission from the broadcasting device to the receivers by transmitting the information as described above at the same time.

#### Conclusion

Application/Control Number: 09/545,851 Page 17

Art Unit: 2614

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael W. Hoye whose telephone number is 571-272-7346.

The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Miller, can be reached at 571-272-7353.

Any response to this action should be mailed to:

Please address mail to be delivered by the United States Postal Service (USPS) as

follows:

Mail Stop \_\_\_\_

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Art Unit: 2614

Effective January 14, 2005, except correspondence for Maintenance Fee payments, Deposit Account Replenishments (see 1.25(c)(4)), and Licensing and Review (see 37 CFR 5.1(c) and 5.2(c)), please address correspondence to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:

United States Patent and Trademark Office Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314

Some correspondence may be submitted electronically. See the Office's Internet Web site <a href="http://www.uspto.gov">http://www.uspto.gov</a> for additional information.

Or faxed to: 571-273-8300

Hand-delivered responses should be brought to the Customer Service Window at the address listed above.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **571-272-2600**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael W. Hoye September 8, 2005

PRIMARY EXAMINER